

AMENDMENTS TO THE DRAWINGS

Replacement drawing sheets 1-13, comprising Figures 1-12, are appended to the end of this document. The Figures have been amended to remove shading, and the photograph of Figure 8 is now featured in black and white.

REMARKS

Examiner Interview:

Applicants and Applicant's representative thank the Examiner for the courtesy extended during the recent telephonic interview of January 12, 2010. During the interview, claim scope, percent identity, and suggested claim language was discussed. Agreement was reached for a claim scope of at least 80% identity, and allowable claim language was determined for the polypeptide claims and for claims reciting the allowable subject matter.

Pending Claims:

Prior to this Amendment, claims 1-58 were pending, and claims 31 and 35-58 were withdrawn. With this Amendment, claims 1-58 are cancelled. New claims 59-113 have been added as replacement claims. Accordingly, claims 59-113 are currently under examination. Applicants respectfully request consideration and allowance of claims 59-113.

Specification:

The amendment to the specification filed May 21, 2009 was objected to because it contains pages that are not legible. With this Amendment, replacement Tables 1, 3 and 12 have been filed. The objection to the specification is believed to be overcome.

Objections:

Claim 50 is objected to under 37 CFR 1.75(c) as being in improper form because claim 50 depends from two claims. With this amendment, claim 50 has been cancelled, and replacement claims 59-113 have been submitted, rendering this objection moot.

Drawings:

New corrected drawings in compliance with 37 CFR 1.121 (d) are required in this application because shaded sequences are not legible. See Fig. 6b, for example. With this amendment, replacement pages are submitted, and the objection is believed to be overcome.

Claim Rejections - 35 USC § 112

The Examiner's rejection of claims 30-48 as indefinite, lacking written description, and failing to provide an enabling disclosure are rendered moot by the amended claims indicated by the Examiner as allowable during the telephonic interview of January 12, 2010.

Claim Rejections - 35 USC § 102(a)

The Examiner's rejection of claims under 35 U.S.C. 102(a) as anticipated by any one of Madsen *et al.*, 2003 (October 9), *Nature*, 425: 637-640; Radutoiu *et al.*, 2003 (October 9), *Nature*, 425:585; or Limpens *et al.*, 2003 (October), *Science* 302:630 is respectfully traversed. Each of these articles were published in October of 2009, several months after the priority date of the instant application (March 7, 2003). Removal of this rejection is respectfully requested.

Claim Rejections - 35 USC § 102(a)/103(a)

The Examiner's rejection of claims under 35 U.S.C. 102(a) as anticipated and/or obvious in view of any one of Krusell, *et al.*, 2002 (November 28), *Nature*, 420:422; Stracke *et al.*, 2002 (June 27), *Nature* 417:959; Lange *et al.*, 1999 (March 29), 142:133; or Endre *et al.*, 2002 (June 27), *Nature* 417:962 is respectfully traversed.

A series of BLAST searches were performed comparing amino acid sequences identified for proteins disclosed in each of the cited references Krusell (HAR1, SYM29), Stracke (SYM29), Lange (RK20-1), and Endre (NORK) against NFR5 amino acid sequences (SEQ ID NOs:8, 15, 31, 32,40, 48) and NFR1 sequences (SEQ ID NOs:24, 25, 52, 53). As shown in the table below and BLAST results attached to this Amendment, the reference molecules exhibited only 28 – 38% identity to the NFR5 and NFR1 sequences.

As disclosed in the specification, for example at page 7, paragraph [0077] of the published specification, a BLAST approach was used to identify the *Medicago truncatula*

sequence (SEQ ID NO:32) in a previously uncharacterized nearly 13kbp *M. truncatula* genomic BAC library (Ac12677). A copy of the GenBank Accession report is attached.

	Percent Amino Acid Identity									
	ID8	ID15	ID31	ID32	ID40	ID48	ID24	ID25	ID52	ID54
<i>Krusell</i> HAR1	31	28	31	28	28	28	38	38	38	38
<i>Endre</i> NORK	29	28	29	28	25	26	35	35	35	36
<i>Lange</i> RK20-1	30	30	30	28	27	29	36	36	36	36
<i>Krusell</i> SYM29	28	26	28	27	30	28	36	36	38	38
<i>Strake</i> SYMRK	28	29	28	32	25	26	36	36	36	36

Accordingly, none of the claimed isolated Nod Factor binding polypeptides is disclosed or suggested by any of the cited prior art. Removal of all rejections is respectfully requested.

CONCLUSION

In conclusion, all of the claims presently pending in this application are now in condition for allowance. A prompt notice to that effect is respectfully solicited. If there are any remaining questions, the Examiner is requested to contact the undersigned at the number listed below.

Respectfully submitted,

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